

AMENDMENTS TO THE CLAIMS

1-12. (Canceled).

13. (Currently amended) An object determining device comprising:

a detecting part for detecting a face of a person from an input image; and

a determining part for determining, when a plurality of faces of people are detected by the detecting part, a face to be focused and/or subject on which to perform exposure control when performing imaging from the plurality of faces of people based on positions of the plurality of faces of people;

a center determining portion for determining a center of the positions of the plurality of faces of people based on the positions of the plurality of faces of people; and

a face determining portion for determining a target face based on the position of the center.

14. (Currently amended) An object determining device comprising:

a frame acquiring section for acquiring an image of a predetermined frame as an image to be processed from an input time-series image including a plurality of frames;

a detecting part for detecting a face of a person from the image to be processed; and

a determining part for determining, when a plurality of faces of people are detected by the detecting part, a face to be focused and/or subject on which to perform exposure control when performing imaging from the plurality of faces of people based on positions of the plurality of faces of people;

a center determining portion for determining a center of the positions of the plurality of faces of people based on the positions of the plurality of faces of people; and
a face determining portion for determining a target face based on the position of the center.

15. (Canceled).

16. (Currently amended) The object determining device according to claim 13 or 14 ~~[[15]]~~, wherein the center determining portion determines a center of a polygon circumscribing the positions of the plurality of faces of people as the center.

17. (Currently amended) The object determining device according to claim 13 or 14 ~~[[15]]~~, wherein the center determining portion determines a barycenter of the positions of the plurality of faces of people as the center.

18. (Currently amended) The object determining device according to claim 13 or 14 ~~[[15]]~~, wherein the face determining portion determines the face of a person positioned closest to the center as the target face.

19. (Currently amended) The object determining device according to claim 13 or 14 ~~[[15]]~~, wherein the face determining portion determines the target face according to a predetermined reference from faces positioned within a predetermined distance from the center.

20. (Original) The object determining device according to claim 13 or 14, wherein the determining part determines a face positioned the lowest of the plurality of faces of people as the target face.

21. (Currently amended) An object determining device comprising:
a detecting part for detecting a face of a person from an input image; and
a determining part for determining, when a plurality of faces of people are detected by the detecting section, a face of a person positioned in the middle, with the number of detected faces as a reference, as a face to be focused and/or subject on which to perform exposure ~~exposure~~ control when performing imaging.

22. (Original) An object determining device comprising:
a frame acquiring section for acquiring an image of a predetermined frame as an image to be processed from an input time-series image including a plurality of frames;
a detecting part for detecting a face of a person from the image to be processed; and
a determining part for determining, when a plurality of faces of people are detected by the detecting part, a face of a person positioned in the middle, with the number of detected faces as a reference, as the face to be focused and/or face on which to perform exposure control when performing imaging.

23. (Withdrawn) The object determining device according to claim 13, 14, 21 or 22, further comprising:

a classifying part for classifying, when a plurality of faces of people are detected by the detecting part, the plurality of detected faces of people into a plurality of clusters based on respective positions; and

a cluster determining part for determining a selected cluster to determine the target face from the plurality of clusters; wherein

the determining part determines the target face based on a face of a person included in the selected cluster.

24. (Original) The object determining device according to claim 13, 14, 21 or 22, further comprising a displaying section for displaying the face of a person determined by the determining part distinctly from other faces.

25. (Withdrawn) An object determining device comprising:

a detecting part for detecting a face of a person from an input image;

a classifying part for classifying, when a plurality of faces of people are detected by the detecting part, the plurality of detected faces of people into a plurality of clusters;

a temporary determining part for determining a face to be focused and/or face on which to perform exposure control when performing imaging from faces of people in the cluster for each of the plurality of clusters; and

an ultimate determining part for ultimately determining the target face from the faces determined by the temporary determining part.

26. (Withdrawn) An object determining device comprising:

a frame acquiring section for acquiring an image of a predetermined frame as an image to be processed from an input time-series image including a plurality of frames;

a detecting part for detecting a face of a person from the image to be processed;

a classifying part for classifying, when a plurality of faces of people are detected by the detecting part, the plurality of detected faces of people into a plurality of clusters;

a temporary determining part for determining a face to be focused and/or face on which to perform exposure control when performing imaging from faces of people included in the cluster for each of the plurality of clusters; and

an ultimate determining part for ultimately determining the target face from faces determined by the temporary determining part.

27. (Withdrawn) An object determining device comprising:

a detecting part for detecting a face of a person for each of a plurality of blocks divided from an input image;

a block determining part for determining a selected block for determining a face to be focused and/or face on which to perform exposure control when performing imaging based on a detection result of the detecting part; and

a determining part for determining the target face from the faces in the selected block.

28. (Withdrawn) An object determining device comprising:

a frame acquiring section for acquiring an image of a predetermined frame as an image to be processed from an input time-series image including a plurality of frames;

a detecting part for detecting a face of a person for each of a plurality of blocks divided from the image to be processed;

a block determining part for determining a selected block for determining a face to be focused and/or face on which to perform exposure control when performing imaging based on a detection result of the detecting part; and

a determining part for determining the target face from faces included in the selected block.

29. (Withdrawn) An object determining device comprising:

a detecting part for detecting a face of a person from an input image;

a deciding part for deciding, when a plurality of faces of people are detected by the detecting part, a largest face from the detected faces of people;

a selecting part for selecting the largest face and a face having a size within a predetermined range with the size of the largest face as a reference from the detected faces; and

a determining part for determining a face to be focused and/or face on which to perform exposure control when performing imaging from the selected faces.

30. (Withdrawn) An object determining device comprising:

a frame acquiring section for acquiring an image of a predetermined frame as an image to be processed from an input time-series image including a plurality of frames;

a detecting part for detecting a face of a person from the image to be processed;

a deciding part for deciding, when a plurality of faces of people are detected by the detecting part, a largest face from the detected faces of people;

a selecting part for selecting the largest face and a face having a size within a predetermined range with the size of the largest face as a reference from the detected faces; and
a determining part for determining a face to be focused and/or face on which to perform exposure control when performing imaging from the selected faces.

31. (Withdrawn) An object determining device comprising:
a detecting part for detecting a face of a person from an input image;
a classifying part for classifying, when a plurality of faces of people are detected by the detecting part, the plurality of detected faces of people into a plurality of clusters based on respective positions; and
a cluster determining part for determining a selected cluster to determine a face to be focused and/or face on which to perform exposure control when performing imaging from the plurality of clusters; and
a determining part for determining the target face from faces included in the selected cluster determined by the cluster determining part.

32. (Withdrawn) An object determining device comprising:
a frame acquiring section for acquiring an image of a predetermined frame as an image to be processed from an input time-series image including a plurality of frames;
a detecting part for detecting a face of a person from the image to be processed;
a classifying part for classifying, when a plurality of faces of people are detected by the detecting part, the plurality of detected faces of people into a plurality of clusters based on the respective positions;

a cluster determining part for determining a selected cluster to determine a face to be focused and/or face on which to perform exposure control when performing imaging from the plurality of clusters; and

a determining part for determining the target face from faces included in the selected cluster determined by the cluster determining part.

33. (Currently amended) A computer readable medium containing a program for an information processing device, said program when executed by the processing device causes the processing device to perform a method comprising the steps of:

detecting a face of a person from an input image; and

determining, when a plurality of faces of people are detected, a face to be focused and/or face on which to perform exposure control when performing imaging from a plurality of faces of people based on positions of the plurality of faces of people;

determining a center of the positions of the plurality of faces of people based on the positions of the plurality of faces of people; and

determining a target face based on the position of the center.

34. (Original) A computer readable medium containing a program for an information processing device, said program when executed by the processing device causes the processing device to perform a method comprising the steps of:

detecting a face of a person from an input image; and

determining, when a plurality of faces of people are detected, a face of a person positioned in the middle, with the number of detected faces as a reference, as a face to be focused and/or face on which to perform exposure control when performing imaging.

35. (Withdrawn) A computer readable medium containing a program for an information processing device, said program when executed by the processing device causes the processing device to perform a method comprising the steps of:

detecting a face of a person from an input image;

classifying, when a plurality of faces of people are detected, the plurality of detected faces of people into a plurality of clusters based on the respective positions;

determining a face to be focused and/or face on which to perform exposure control when performing imaging from faces included in the cluster for each of the plurality of clusters; and

ultimately determining the target face from faces detected in each of the cluster.

36. (Withdrawn) A computer readable medium containing a program for an information processing device, said program when executed by the processing device causes the processing device to perform a method comprising the steps of:

detecting a face of a person in each of a plurality of blocks divided from an input image;

determining a selected block to determine a face to be focused and/or face on which to perform exposure control when performing imaging based on detection result in each of the block; and

determining the target face from faces included in the selected block.

37. (Withdrawn) A computer readable medium containing a program for an information processing device, said program when executed by the processing device causes the processing device to perform a method comprising the steps of:

detecting a face of a person from an input image;

deciding, when a plurality of faces of people are detected, a largest face out of the plurality of detected faces of people;

selecting the largest face and at least one other face having a size within a predetermined range with the size of the largest face as a reference from the detected faces; and

determining the face to be focused and/or face on which to perform exposure control when performing imaging from the selected faces.

38. (Withdrawn) A computer readable medium containing a program for an information processing device, said program when executed by the processing device causes the processing device to perform a method comprising the steps of:

detecting a face of a person from an input image;

classifying, when a plurality of faces of people are detected, the plurality of detected faces of people into a plurality of clusters based on the respective positions;

determining a selected cluster for determining a face to be focused and/or face on which to perform exposure control when performing imaging from the plurality of clusters; and

determining the target face from faces included in the determined selected cluster.

39. (Canceled).

40. (Currently amended) ~~The~~ An object determining device comprising: according to
claim 1 or 2

a face detecting part for detecting, from an image imaged based on arbitrary focal point
information as an image to be processed, a face of a person based on a relative value of statistics in
a plurality of characteristic regions produced by contour or parts of a face of a person from the
image to be processed; and

a determining part for determining a subject to be focused and/or subject on which to
perform exposure control when performing imaging based on the face detected by the face detecting
part,

wherein when a plurality of faces of people are detected by the face detecting part, the
determining part determines a face of a person positioned in the middle, with the number of detected
faces as a reference, as the face to be focused and/or face on which to perform exposure control
when performing imaging.

41-44. (Canceled).

45. (New) An object determining device comprising:

a frame acquiring part for acquiring an image of a predetermined frame as an image to
be processed from a time-series image including a plurality of frames imaged based on arbitrary
focal point information;

a face detecting part for detecting a face of a person based on a relative value of statistics
in a plurality of characteristic regions produced by contour or parts of a face of a person from the
image to be processed; and

a determining part for determining a subject to be focused and/or subject on which to perform exposure control when performing imaging based on the face detected by the face detecting part,

wherein when a plurality of faces of people are detected by the face detecting part, the determining part determines a face of a person positioned in the middle, with the number of detected faces as a reference, as the face to be focused and/or face on which to perform exposure control when performing imaging.

46. (New) A computer readable medium containing a program for an information processing device, said program when executed by the processing device causes the processing device to perform a method comprising the steps of:

acquiring an image of a predetermined frame as an image to be processed from an input time-series image including a plurality of frames;

detecting a face of a person from the image to be processed;

determining, when a plurality of faces of people are detected, a face to be focused and/or subject on which to perform exposure control when performing imaging from the plurality of faces of people based on positions of the plurality of faces of people;

determining a center of the positions of the plurality of faces of people based on the positions of the plurality of faces of people; and

determining a target face based on the position of the center.

47. (New) A computer readable medium containing a program for an information processing device, said program when executed by the processing device causes the processing device to perform a method comprising the steps of:

detecting a face of a person from an input image; and

determining, when a plurality of faces of people are detected, a face of a person positioned in the middle, with the number of detected faces as a reference, as a face to be focused and/or subject on which to perform exposure control when performing imaging.

48. (New) A computer readable medium containing a program for an information processing device, said program when executed by the processing device causes the processing device to perform a method comprising the steps of:

acquiring an image of a predetermined frame as an image to be processed from an input time-series image including a plurality of frames;

detecting a face of a person from the image to be processed; and

determining, when a plurality of faces of people are detected, a face of a person positioned in the middle, with the number of detected faces as a reference, as the face to be focused and/or face on which to perform exposure control when performing imaging.

49. (New) A computer readable medium containing a program for an information processing device, said program when executed by the processing device causes the processing device to perform a method comprising the steps of:

acquiring an image of a predetermined frame as an image to be processed from a time-series image including a plurality of frames imaged based on arbitrary focal point information;

detecting a face of a person based on a relative value of statistics in a plurality of characteristic regions produced by contour or parts of a face of a person from the image to be processed; and

determining a subject to be focused and/or subject on which to perform exposure control when performing imaging based on the detected face,

wherein when a plurality of faces of people are detected, the determining step determines a face of a person positioned in the middle, with the number of detected faces as a reference, as the face to be focused and/or face on which to perform exposure control when performing imaging.